

ABSTRACT OF THE DISCLOSURE

A method of making a no wash bead based assay comprises preparing a first reagent comprising a buffer, and preparing a second reagent comprising a protein. Beads of preselected size and having a coefficient of variation less than 5% are prepared, including washing the beads in the buffer to form a bead-buffer matrix and reducing the surfactancy of the beads to an effective amount. Thereafter, an antigen for detecting the presence of a target species is added to the bead-buffer matrix such that the antigen attaches to the beads to form a bead-antigen mixture. The surfactancy of the beads facilitates attachment of the antigen thereto. Buffer is added to the bead-antigen mixture and thereafter the mixture is incubated. The second reagent is added to the bead-antigen mixture to reduce or eliminate non-specific binding sites.